

Fig. 1B

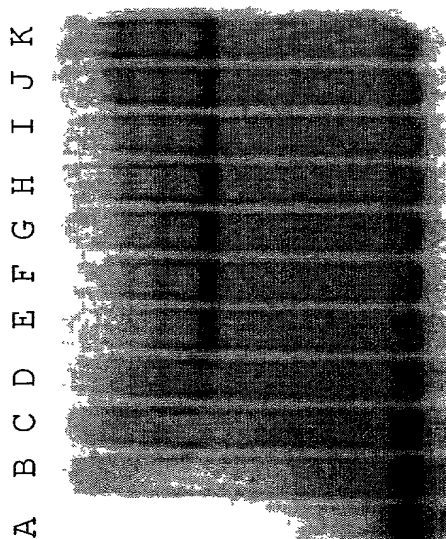


Fig. 1A

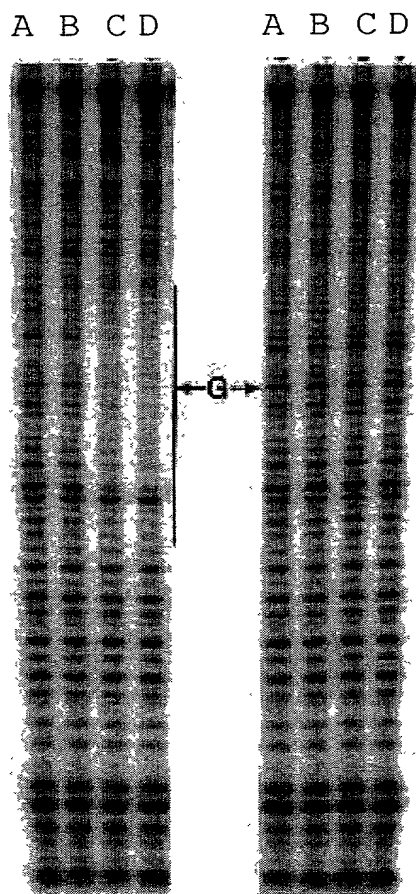


Fig. 1C

Fig. 1D

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FIG. 1E

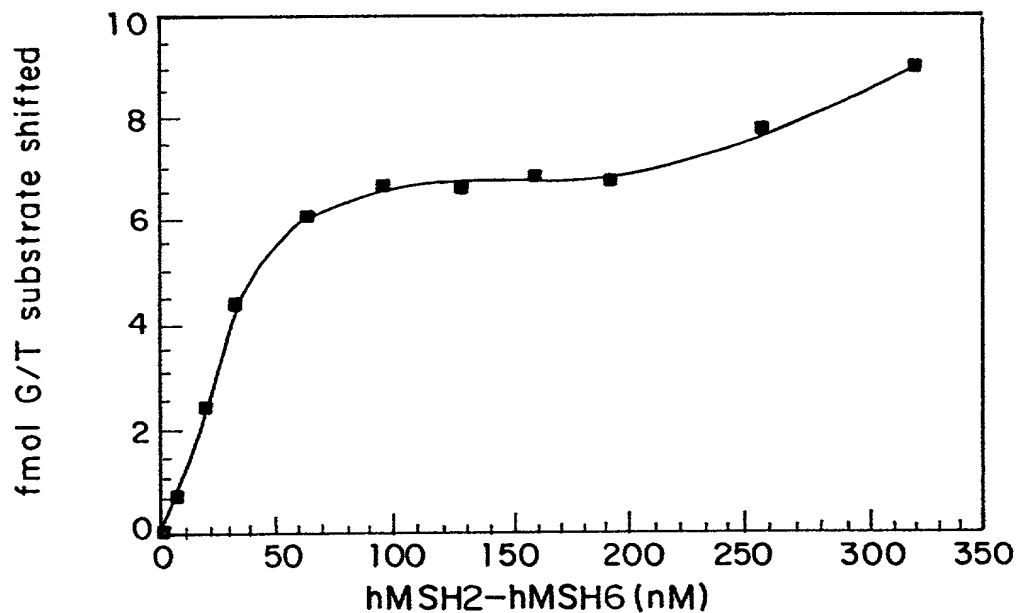
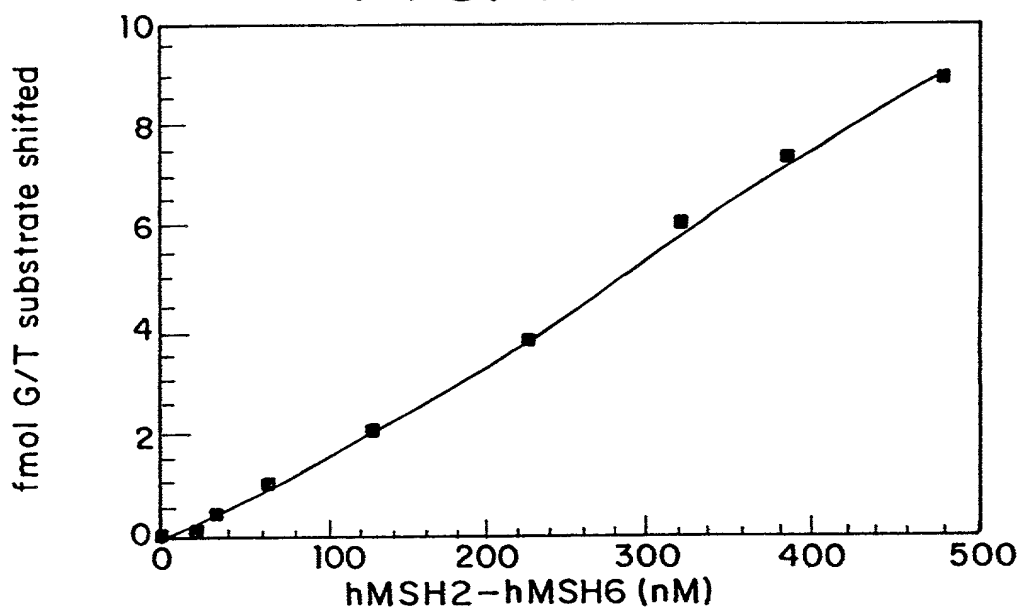


FIG. 1F



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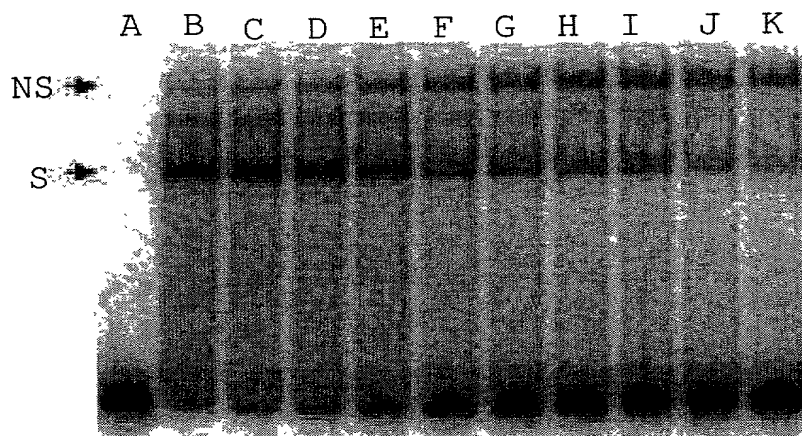


Fig. 2A

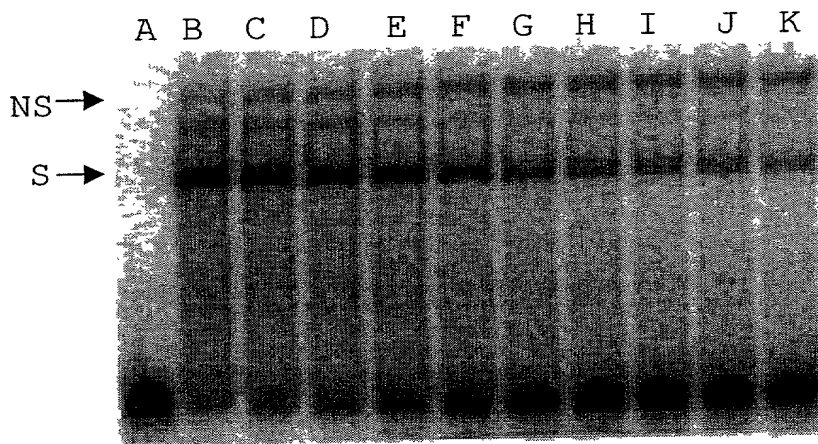


Fig. 2B

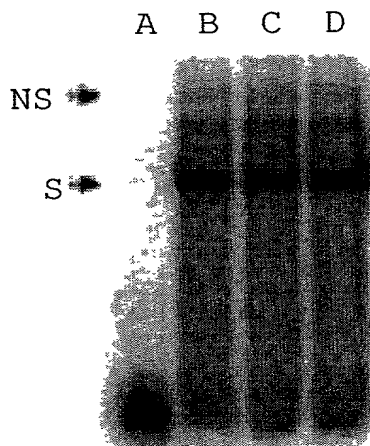


Fig. 2C

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FIG. 2D

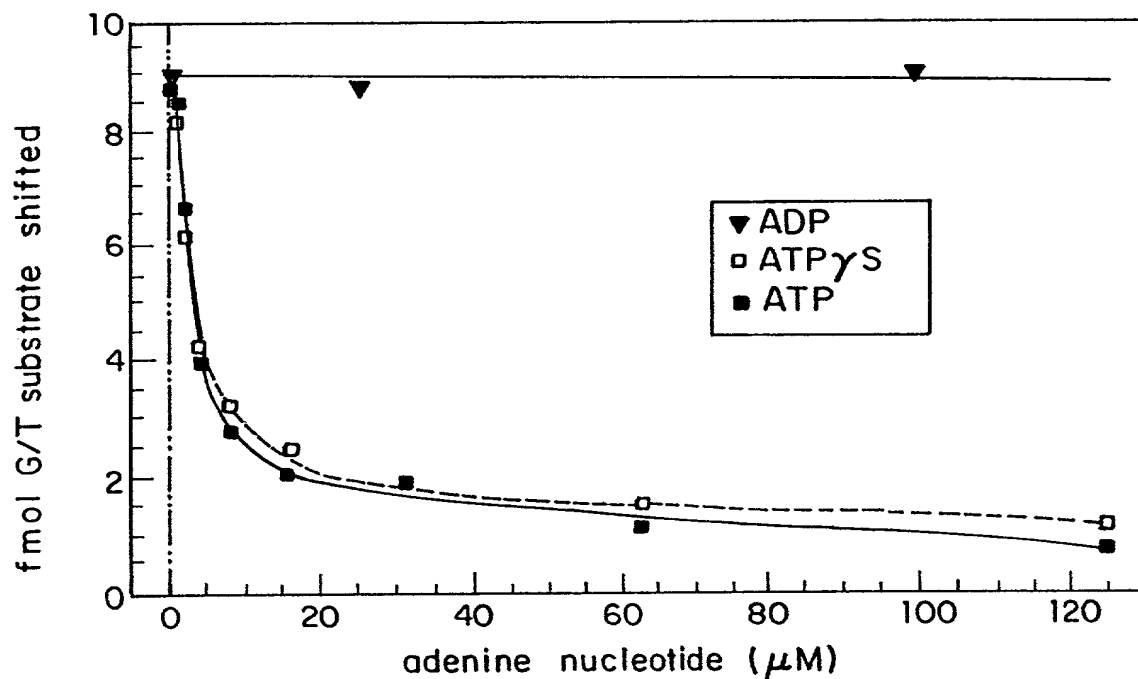
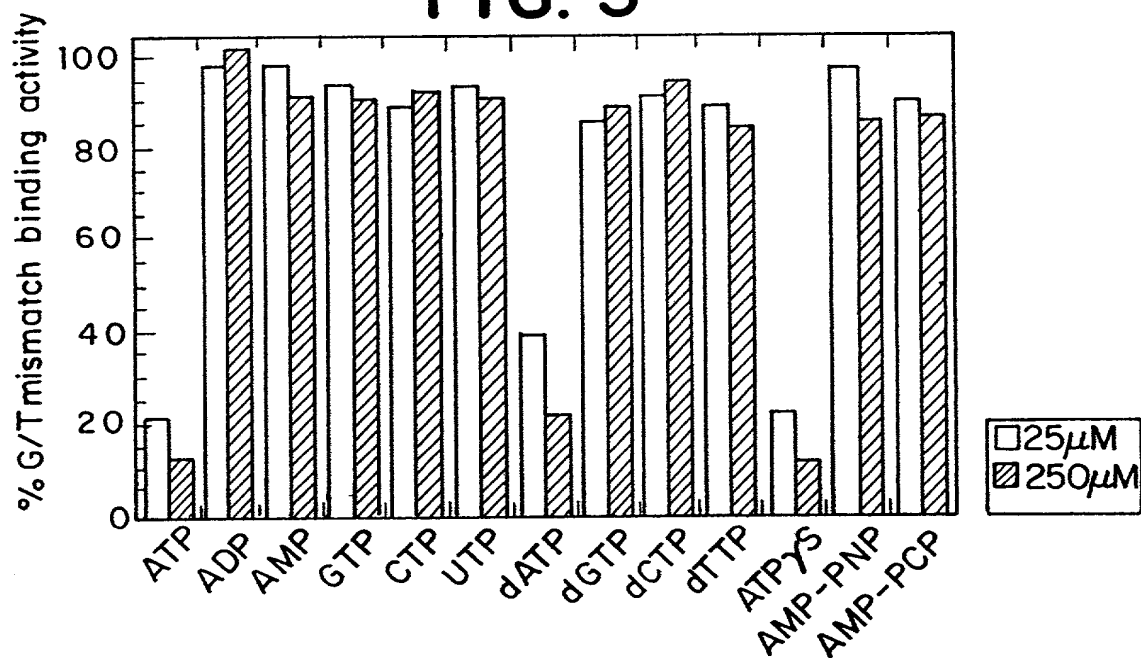


FIG. 3



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FIG. 4A

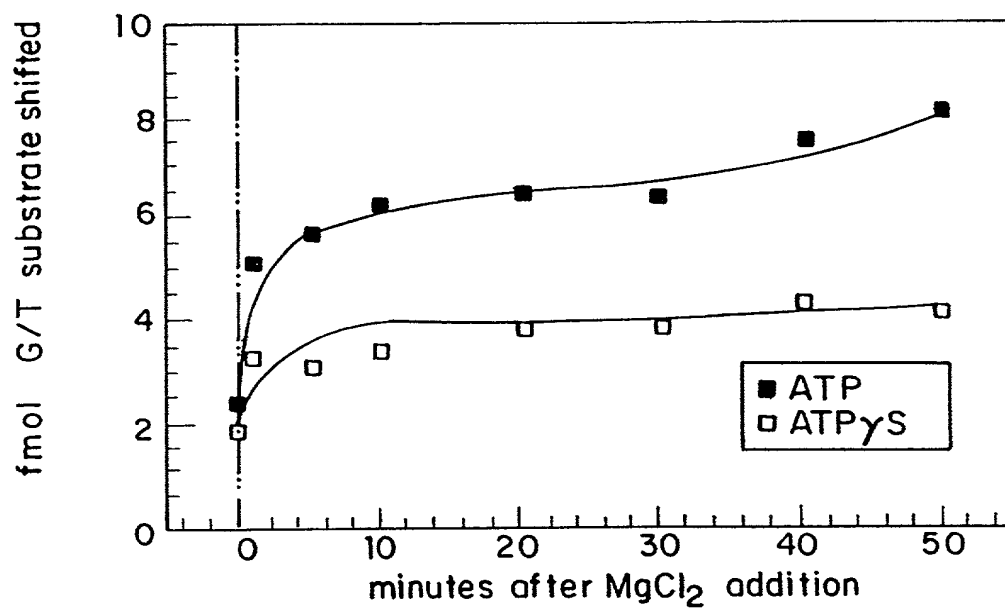
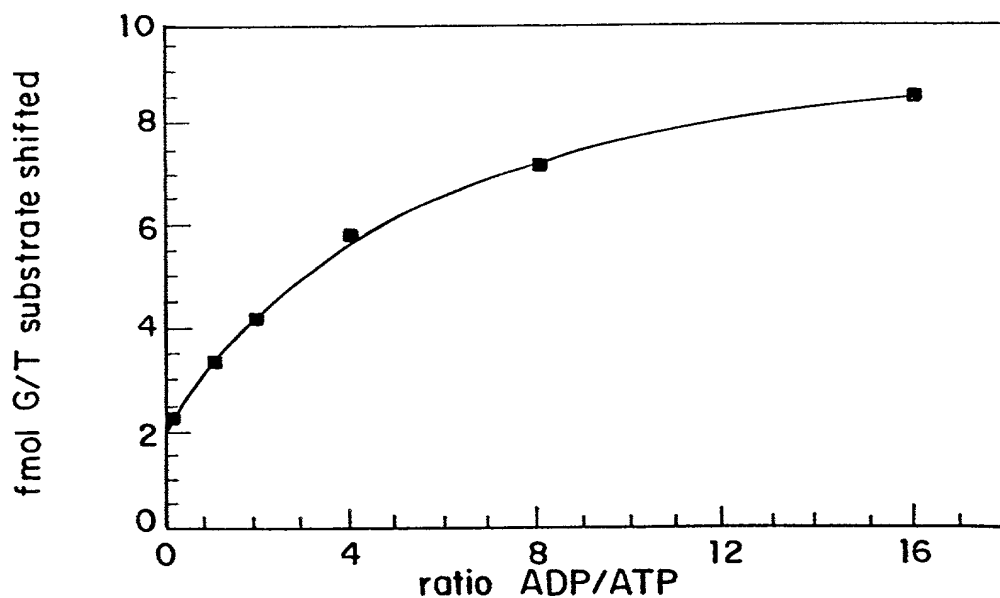


FIG. 4B



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FIG. 5A

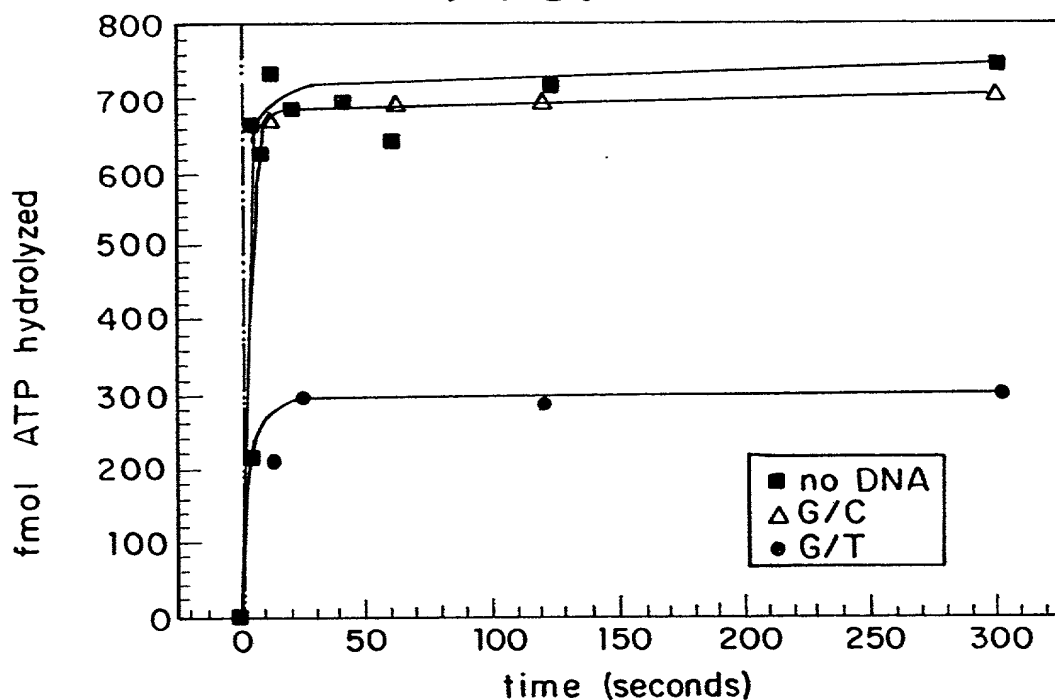
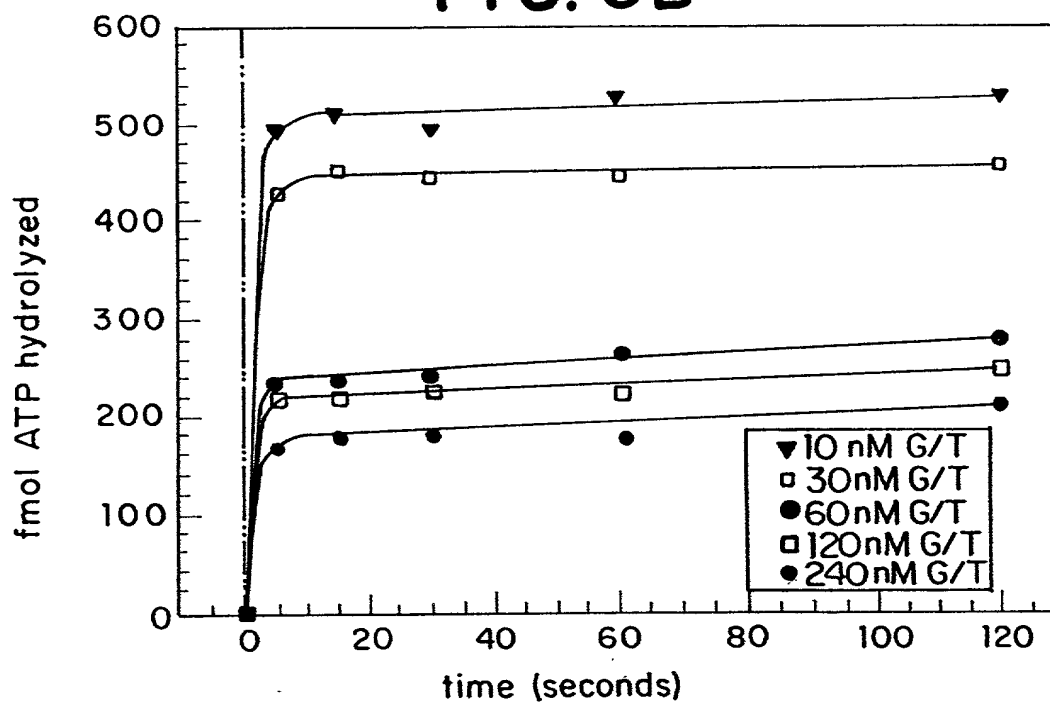


FIG. 5B



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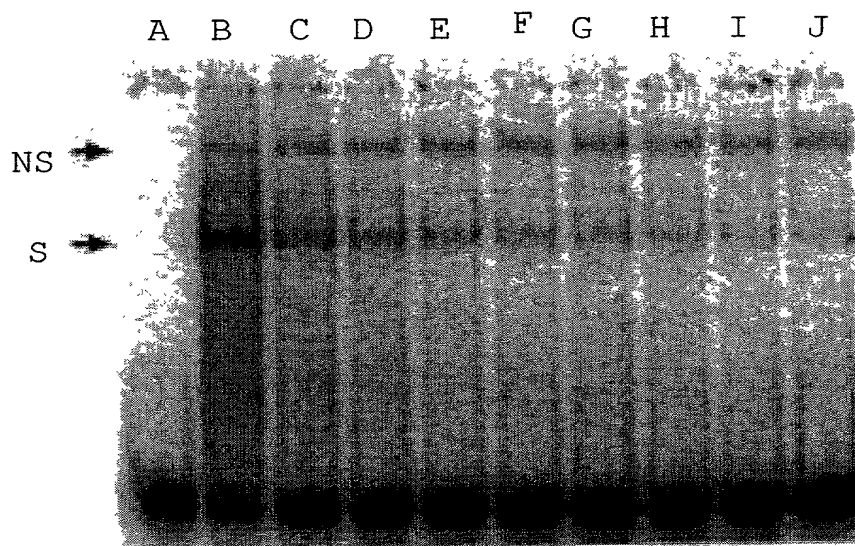


Fig. 6A

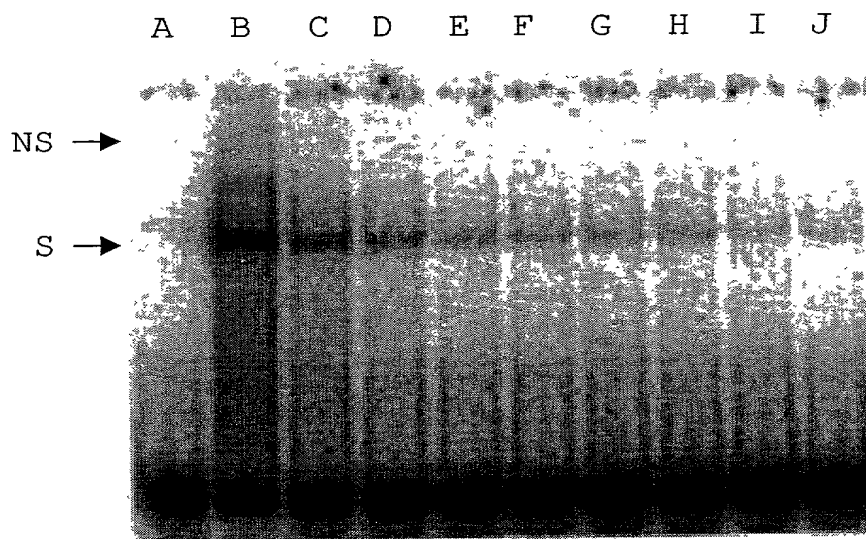


Fig. 6B

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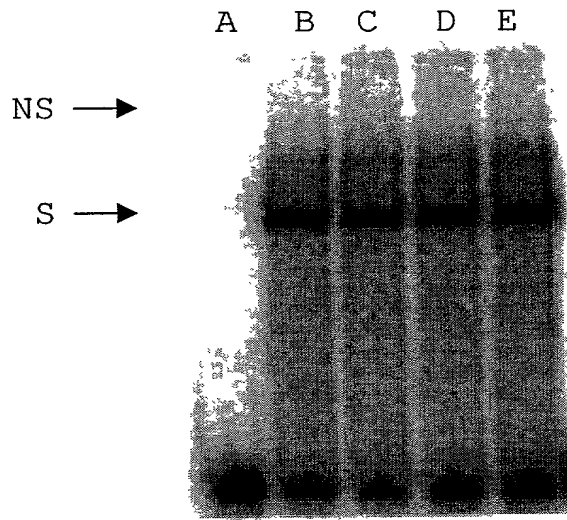


Fig. 6C

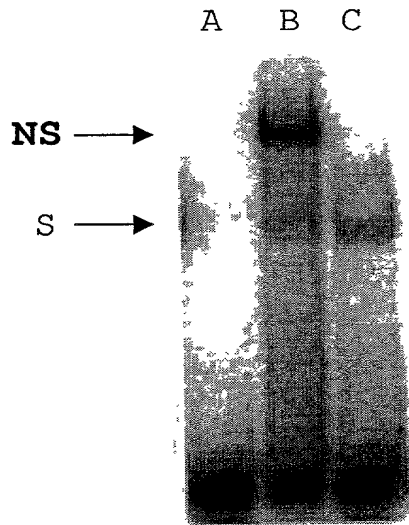


Fig. 6D

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FIG. 7

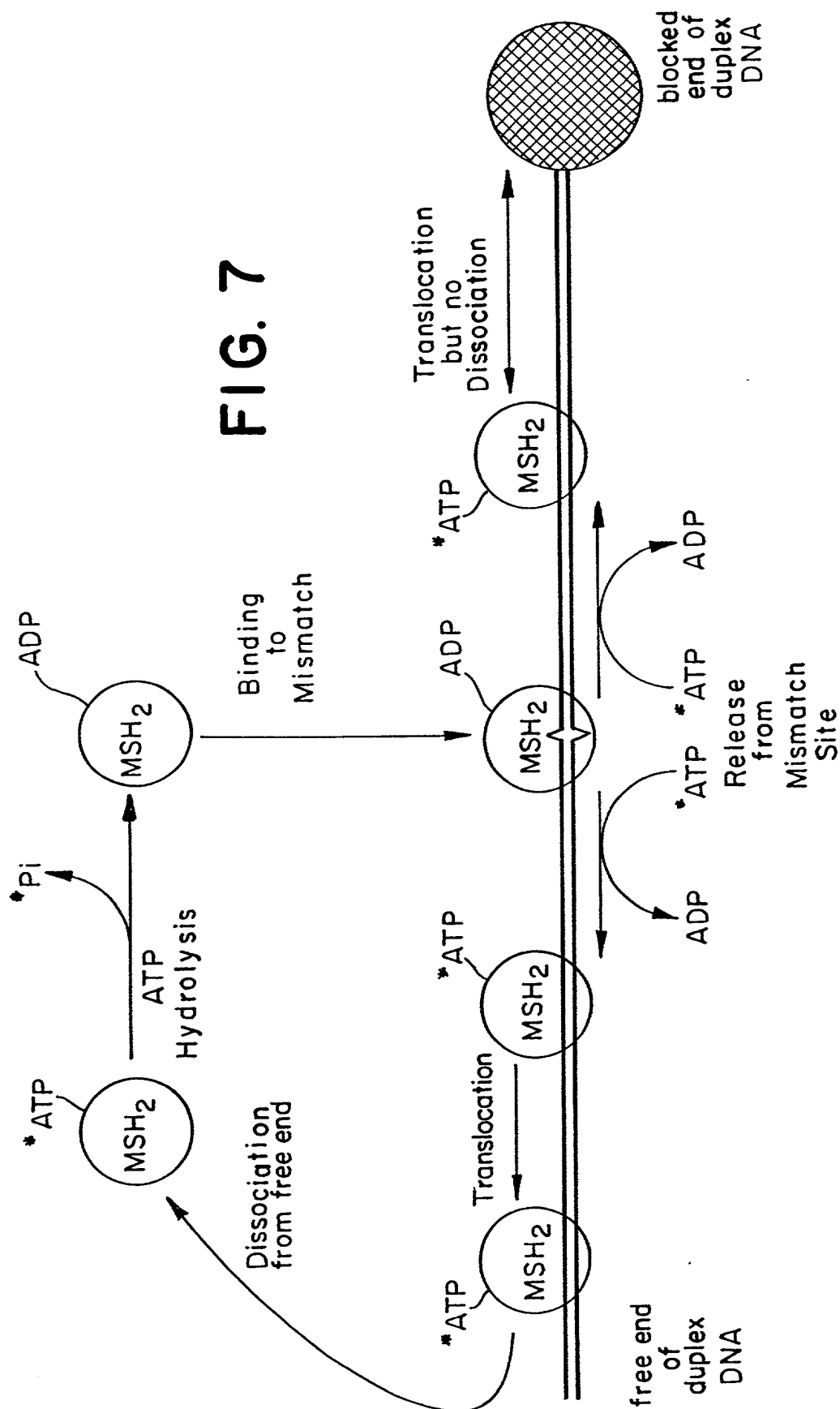


Fig. 8A

CCTGGTACCT CGAGCGATCA AGCTTGGTGG AATTCGCCG

Fig. 8B

CCTGGTACCT CGAGCGATCG AGCTTGGTGG AATTCGCCG

Fig. 8C

ACTATAGGGC GAATTGGGTA CCGCTGAATT GCACCGAGCT CGATCCTCGA
TGATCCTAAG CTAAGCTTCA GCTCCAGCTT T

Fig. 8D

ACTATAGGGC GAATTGGGTA CCGCTGAATT GCACCGAGCT TGATCCTCGA
TGATCCTAAG CTAAGCTTCA GCTCCAGCTT T

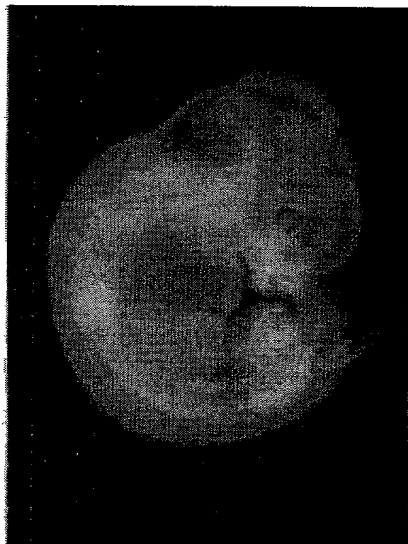


Fig. 9A



Fig. 9C



Fig. 9D



Fig. 9B

FIG. 9A-9D



Fig. 10C

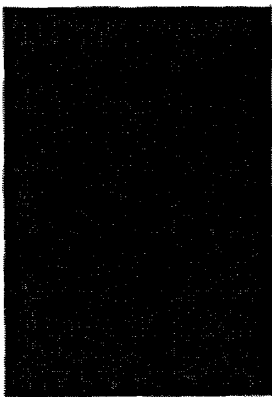


Fig. 10F

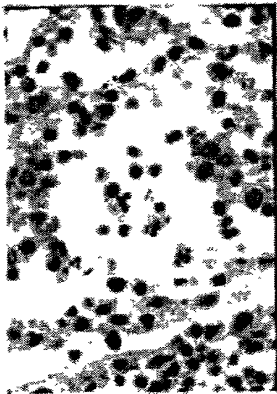


Fig. 10B

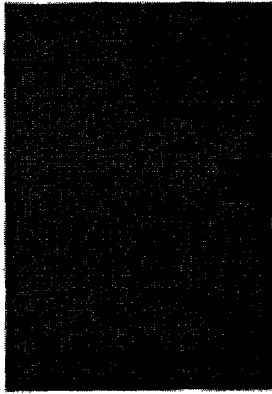


Fig. 10E

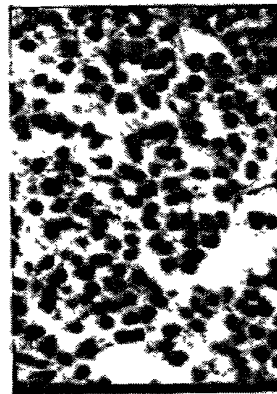


Fig. 10A



Fig. 10D

702230* 6064E660

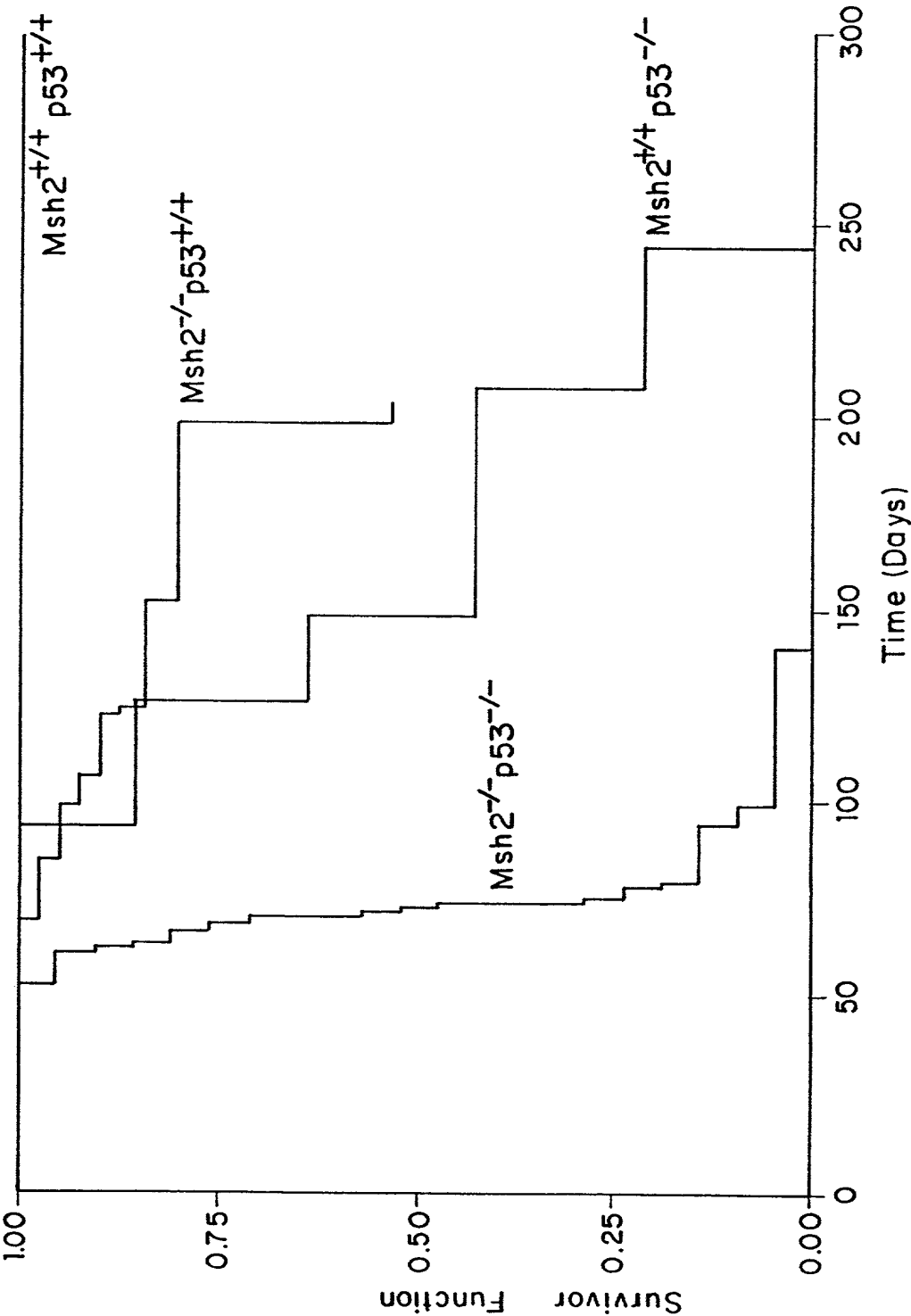


FIG. 11

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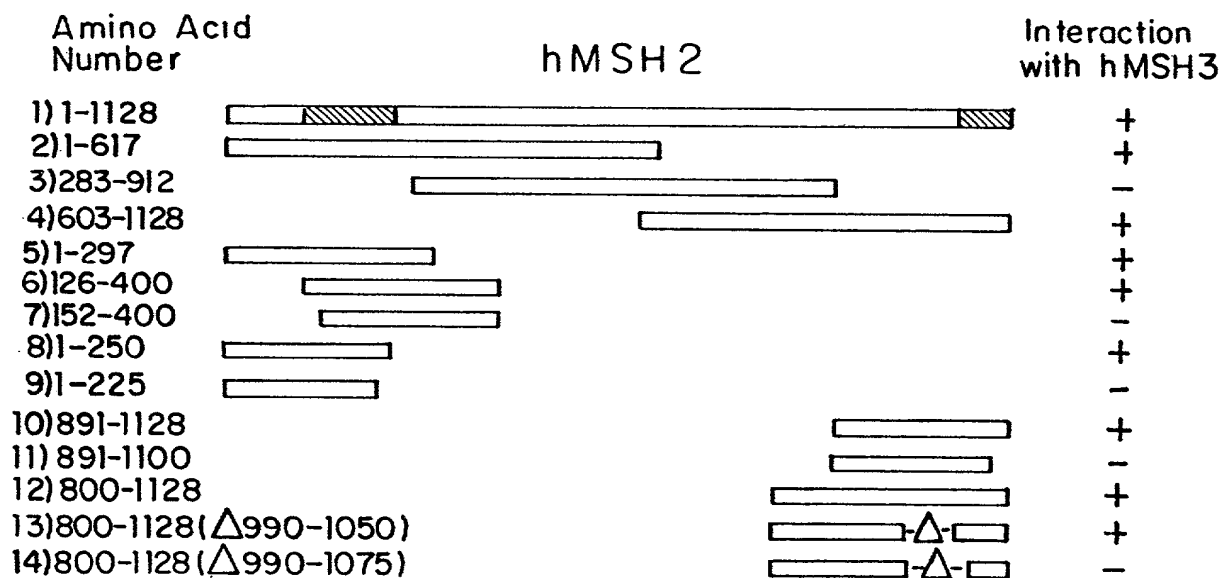


FIG. 12

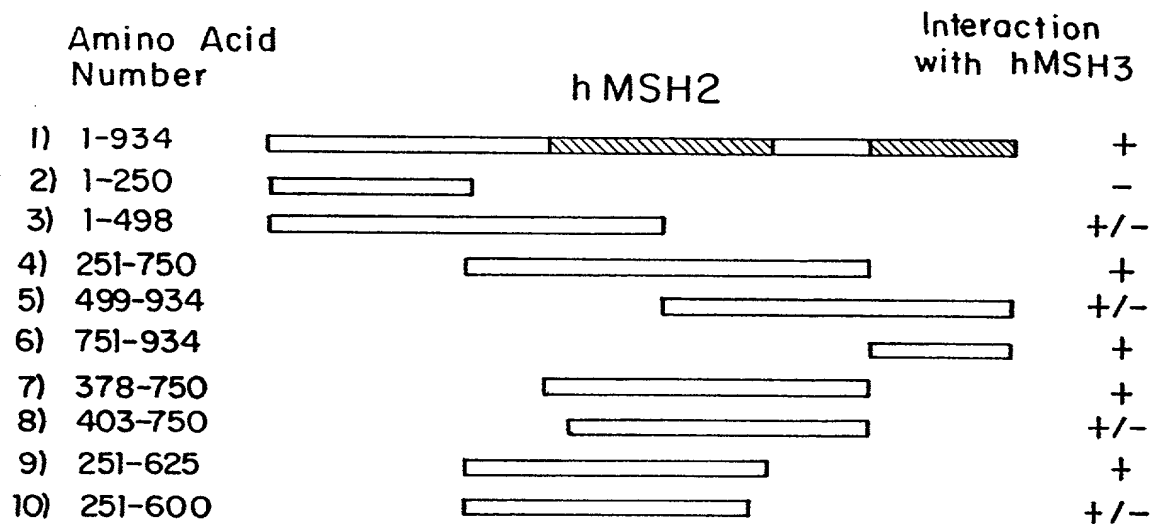


FIG. 13

FIG. 12

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FIG. 14

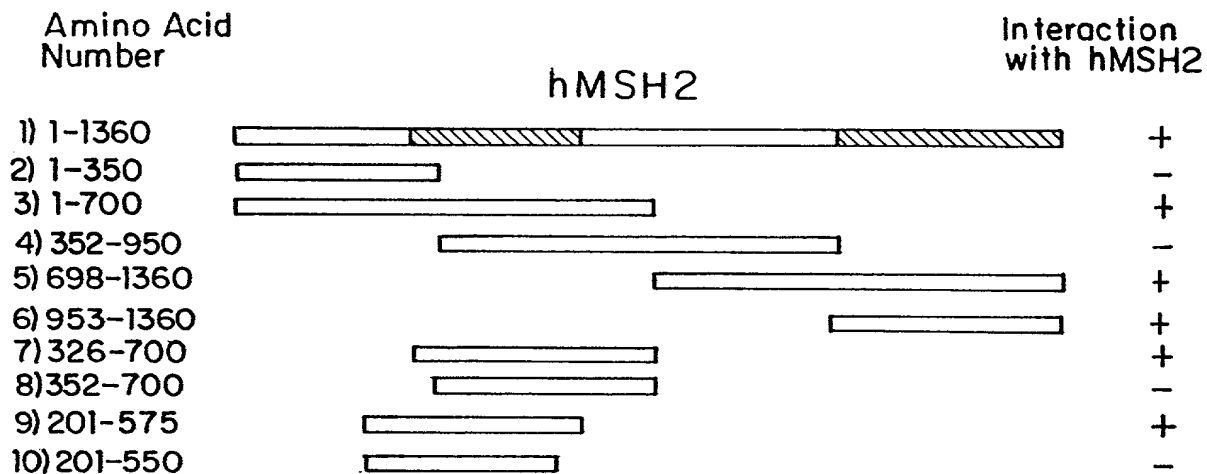


FIG. 15

FIG. 14

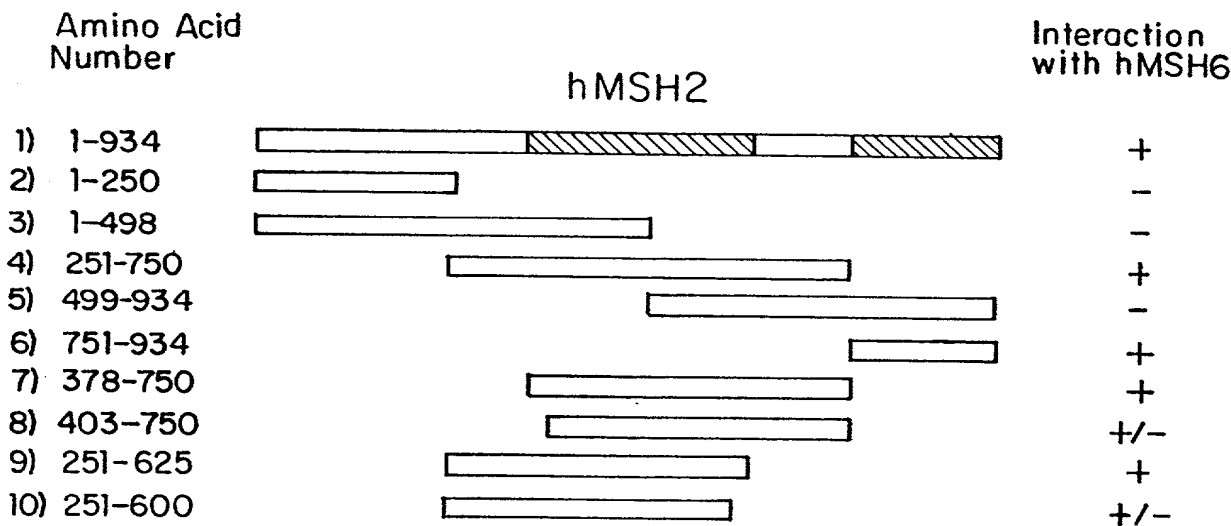


FIG. 16

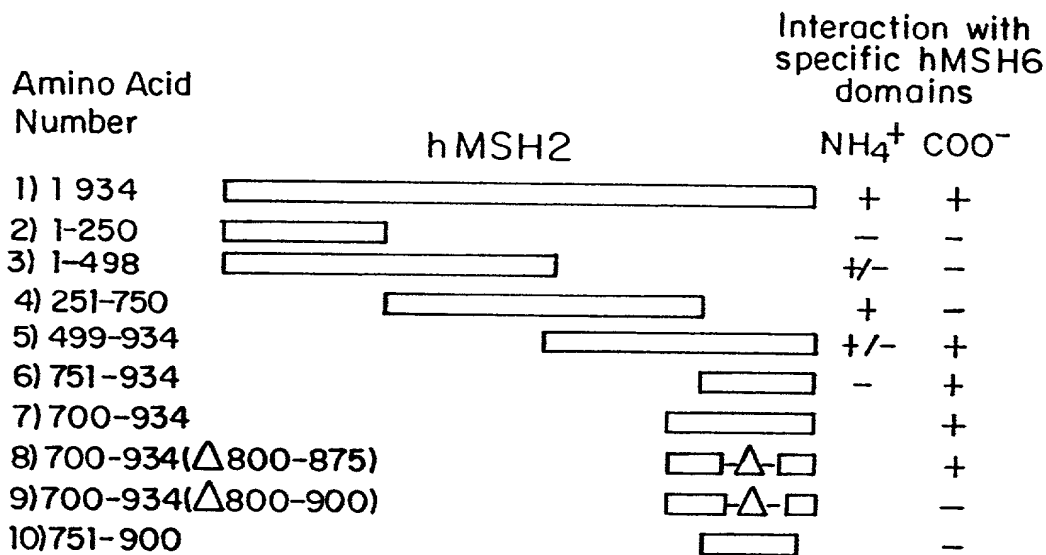


FIG. 17

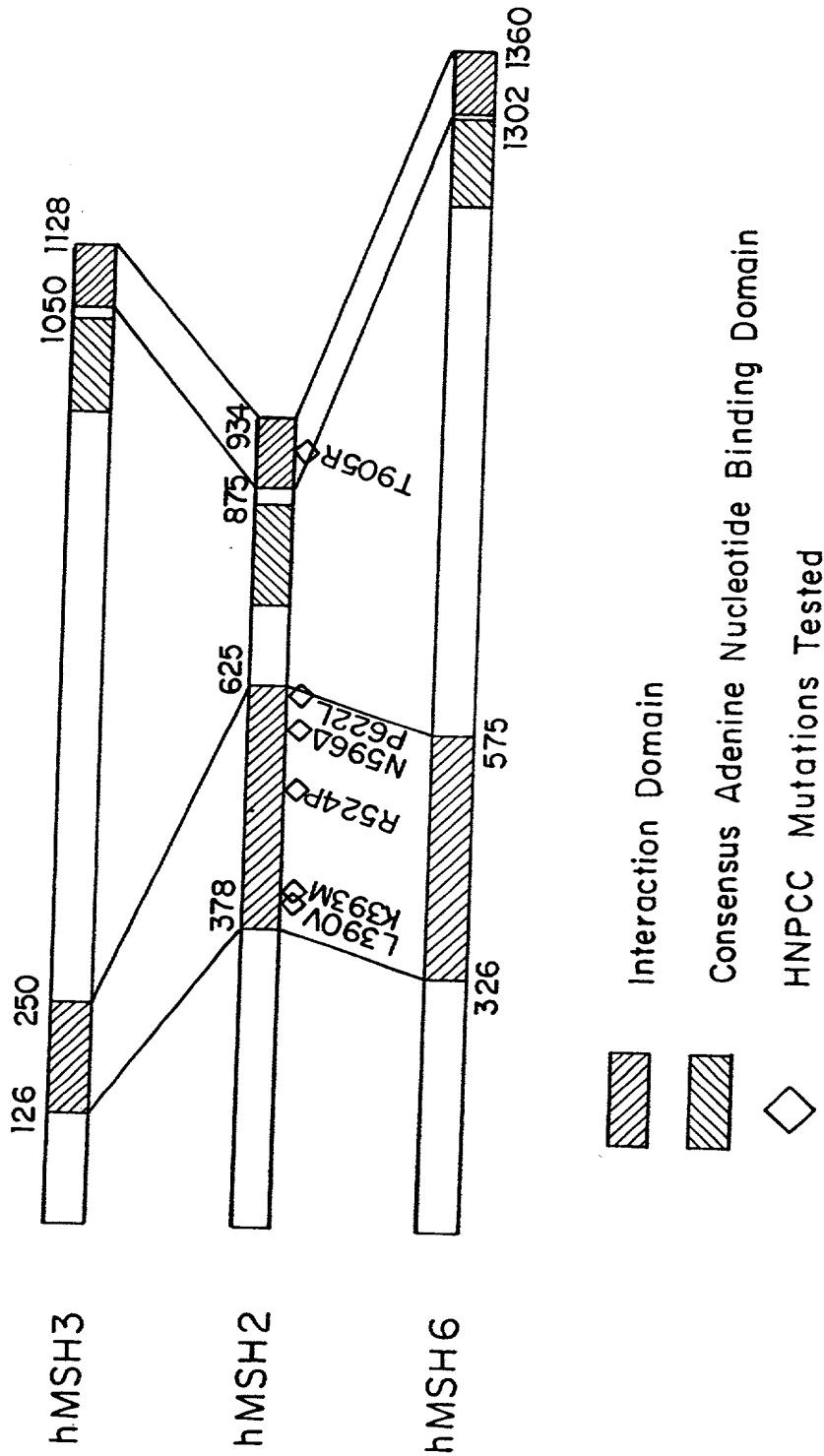


FIG. 18

1 CAGAAACCTCATACTTCTCGGGTCAGGGAAGGTTTGGGAGGGC
44 GTGGCGGTGGTCAGCGGGGCTTCTCCACCTGTAGCGACTCAGAGCCTCCAAGCTC
1 Met Ala Ser Leu Gly Ala Asn Pro Arg Arg Thr Pro Gln Gly Pro
102 ATG GCC TCC TTA GGA GCG AAC CCA AGG ACA CCG CAG GGA CCG
16 Arg Pro Gly Ala Ala Ser Ser Gly Phe Pro Ser Pro Ala Pro Val
147 AGA CCT GGG GCG GCC TCC TCC GGC TTC CCC AGC CCG GCC CCA GTG
31 Pro Gly Pro Arg Glu Glu Glu Glu Val Glu Glu Glu Glu
192 CCG GGC CCC AGG GAG GCC GAG GAG GAG GAA GTC GAG GAG GAG GAG
46 Glu Leu Ala Glu Ile His Leu Cys Val Leu Trp Asn Ser Gly Tyr
237 GAG CTG GCC GAG ATC CAT CTG TGT GTG CTG TGG AAT TCA GGA TAC
61 Leu Gly Ile Ala Tyr Tyr Asp Thr Ser Asp Ser Thr Ile His Phe
282 TTG GGC ATT GCC TAC TAT GAT ACT AGT GAC TCC ACT ATC CAC TTC
76 Met Pro Asp Ala Pro Asp His Glu Ser Leu Lys Leu Gln Arg
327 ATG CCA GAT GCC CCA GAC CAC GAG AGC CTC AAG CTT CTC CAG AGA
91 Val Leu Asp Glu Ile Asn Pro Gln Ser Val Val Thr Ser Ala Lys
372 GTT CTG GAT GAG ATC AAT CCC CAG TCT GTT GTT ACG AGT GCC AAA
106 Gln Asp Glu Asn Met Thr Arg Phe Leu Gly Lys Leu Ala Ser Gln
417 CAG GAT GAG AAT ATG ACT CGA TTT CTG GGA AAG CTT GCC TCC CAG

Fig. 19A

121	Glu	His	Arg	Glu	Pro	Lys	Arg	Pro	Glu	Ile	Ile	Phe	Leu	Pro	Ser
462	GAG	CAC	AGA	GAG	CCT	AAA	AGA	CCT	GAA	ATC	ATA	TTT	TTG	CCA	AGT
136	Val	Asp	Phe	Gly	Leu	Glu	Ile	Ser	Lys	Gln	Arg	Leu	Leu	Ser	Gly
507	GTG	GAT	TTT	GGT	CTG	GAG	ATA	AGC	AAA	CAA	CGC	CTC	CTT	TCT	GGA
151	Asn	Tyr	Ser	Phe	Ile	Pro	Asp	Ala	Met	Thr	Ala	Thr	Glu	Lys	Ile
552	AAC	TAC	TCC	TTC	ATC	CCA	GAC	GCC	ATG	ACT	GCC	ACT	GAG	AAA	ATC
166	Leu	Phe	Leu	Ser	Ser	Ile	Ile	Pro	Phe	Asp	Cys	Leu	Leu	Thr	Val
597	CTC	TTC	CTC	TCT	TCC	ATT	ATT	CCC	TTT	GAC	TGC	CTC	CTC	ACA	GTT
181	Arg	Ala	Leu	Gly	Gly	Leu	Leu	Lys	Phe	Leu	Gly	Arg	Arg	Arg	Ile
642	CGA	GCA	CTT	GGA	GGG	CTG	CTG	AAG	TTC	CTG	GGT	CGA	AGA	AGA	ATC
196	Gly	Val	Glu	Leu	Glu	Asp	Tyr	Asn	Val	Ser	Val	Pro	Ile	Leu	Gly
687	GGG	GTT	GAA	CTG	GAA	GAC	TAT	AAT	GTC	AGC	GTC	CCC	ATC	CTG	GGC
211	Phe	Lys	Lys	Phe	Met	Leu	Thr	His	Leu	Val	Asn	Ile	Asp	Gln	Asp
732	TTT	AAG	AAA	TTT	ATG	TTG	ACT	CAT	CTG	GTG	AAC	ATA	GAT	CAA	GAC
226	Thr	Tyr	Ser	Val	Leu	Gln	Ile	Phe	Lys	Ser	Glu	Ser	His	Pro	Ser
777	ACT	TAC	AGT	GTT	CTA	CAG	ATT	TTT	AAG	AGT	GAG	TCT	CAC	CCC	TCA
241	Val	Tyr	Lys	Val	Ala	Ser	Gly	Leu	Lys	Glu	Gly	Leu	Ser	Leu	Phe
822	GTG	TAC	AAA	GTG	GCC	AGT	GGA	CTG	AAG	GAG	GGG	CTC	AGC	CTC	TTT

Fig. 19B

256 Gly Ile Leu Asn Arg Cys His Cys Lys Trp Gly Glu Lys Leu Leu
867 GGA ATC CTC AAC AGA TGC CAC TGT AAG TGG GGA GAG AAG CTG CTC

271 Arg Leu Trp Phe Thr Arg Pro Thr His Asp Leu Gly Glu Leu Ser
912 AGG CTA TGG TTC ACA CGT CCG ACT CAT GAC CTG GGG GAG CTC AGT

286 Ser Arg Leu Asp Val Ile Gln Phe Phe Leu Leu Pro Gln Asn Leu
957 TCT CGT CTG GAC GTC ATT CAG TTT TTT CTG CTG CCC CAG AAT CTG

301 Asp Met Ala Gln Met Leu His Arg Leu Leu Gly His Ile Lys Asn
1002 GAC ATG GCT CAG ATG CTG CAT CGG CTC CTG GGT CAC ATC AAG AAC

316 Val Pro Leu Ile Leu Lys Arg Met Lys Leu Ser Ser His Thr Lys Val
1047 GTG CCT CTG ATT CTG AAA CGC ATG AAG TTT TCC CAC ACC AAG GTC

331 Ser Asp Trp Gln Val Leu Tyr Lys Thr Val Tyr Ser Ala Leu Gly
1092 AGC GAC TGG CAG GTT CTC TAC AAG ACT GTG TAC AGT GCC CTG GGC

346 Leu Arg Asp Ala Cys Arg Ser Leu Pro Gln Ser Ile Gln Leu Phe
1137 CTG AGG GAT GCC TGC CGC TCC CTG CCG CAG TCC ATC CAG CTC TTT

361 Arg Asp Ile Ala Gln Glu Phe Ser Asp Asp Leu His His Ile Ala
1182 CGG GAC ATT GCC CAA GAG TTC TCT TCT GAT GAC CTG CAC CAT ATC GCC

376 Ser Leu Ile Gly Lys Val Val Asp Phe Glu Gly Ser Leu Ala Glu
1227 AGC CTC ATT GGG AAA GTA GTG GAC TTT GAG GGC AGC CTT GCT GAA

Fig. 19C

391	Asn	Arg	Phe	Thr	Val	Leu	Pro	Asn	Ile	Asp	Pro	Glu	Ile	Asp	Glu
1272	AAT	CGC	TTC	ACA	GTC	CTC	CCC	AAC	ATA	GAT	CCT	GAA	ATT	GAT	GAG
406	Lys	Lys	Arg	Arg	Leu	Met	Gly	Leu	Pro	Ser	Phe	Leu	Thr	Glu	Val
1317	AAA	AAG	CGA	AGA	CTG	ATG	GGA	CTT	CCC	AGT	TTC	CTT	ACT	GAG	GTT
421	Ala	Arg	Lys	Glu	Leu	Glu	Asn	Leu	Asp	Ser	Arg	Ile	Pro	Ser	Cys
1362	GCC	CGC	AAG	GAG	CTG	GAG	AAT	CTG	GAC	TCC	CGT	ATT	CCT	TCA	TGC
436	Ser	Val	Ile	Tyr	Ile	Pro	Leu	Ile	Gly	Phe	Leu	Leu	Ser	Ile	Pro
1407	AGT	GTC	ATC	TAC	ATC	CCT	CTG	ATT	GGC	TTC	CTT	CTT	TCT	ATT	CCC
451	Arg	Leu	Pro	Ser	Met	Val	Glu	Ala	Ser	Asp	Phe	Glu	Ile	Asn	Gly
1452	CGC	CTG	CCT	TCC	ATG	GTA	GAG	GCC	AGT	GAC	TTT	GAG	ATT	AAT	GGA
466	Leu	Asp	Phe	Met	Phe	Leu	Ser	Glu	Glu	Lys	Leu	His	Tyr	Arg	Ser
1497	CTG	GAC	TTC	ATG	TTT	CTC	TCA	GAG	GAG	AAG	CTG	CAC	TAT	CGT	AGT
481	Ala	Arg	Thr	Lys	Glu	Leu	Asp	Ala	Leu	Leu	Gly	Asp	Leu	His	Cys
1542	GCC	CGA	ACC	AAG	GAG	CTG	GAT	GCA	TTG	CTG	GGG	GAC	CTG	CAC	TGC
496	Glu	Ile	Arg	Asp	Gln	Glu	Thr	Leu	Leu	Met	Tyr	Gln	Leu	Gln	Cys
1587	GAG	ATC	CGG	GAC	CAG	GAG	ACG	CTG	CTG	ATG	TAC	CAG	CTA	CAG	TGC
511	Gln	Val	Leu	Ala	Arg	Ala	Ala	Val	Leu	Thr	Arg	Val	Leu	Asp	Leu
1632	CAG	GTG	CTG	GCA	CGA	GCA	GCT	GTC	TTA	ACC	CGA	GTA	TTG	GAC	CTT

Fig. 19D

526 Ala Ser Arg Leu Asp Val Leu Leu Ala Leu Ala Ser Ala Ala Arg
 1677 GCC TCC CGC CTG GAC GAC GTC GTC CTG CTG GCT CTT GCC AGT GCT GCC CGG

541 Asp Tyr Gly Tyr Ser Arg Pro Arg Tyr Ser Pro Gln Val Leu Gly
 1722 GAC TAT GGC TAC TCA AGG CCG CGT TAC TCC CCA CAA GTC CTT GGG

556 Val Arg Ile Gln Asn Gly Arg His Pro Leu Met Glu Leu Cys Ala
 1767 GTA CGA ATC CAG AAT GGC AGA CAT CCT CTG ATG GAA CTC TGT GCC

571 Arg Thr Phe Val Pro Asn Ser Thr Gly Pro Glu Cys Gly Gly Asp Lys Gly
 1812 CGA ACC TTT GTG GTG CCC AAC TCC ACA GAA TGT GGT GGG GAC AAA GGG

586 Arg Val Lys Val Ile Thr Gly Leu Ile Thr Phe Met Ala Leu Val Gly
 1857 AGG GTC AAA GTC ATC ACT ACT GGA GGC TTG ATC ACA TTC ATG GCC CTG GTA GGC

601 Tyr Leu Lys Lys Gln Val Val Gly Leu Ile Thr Phe Met Ala Leu Val Gly
 1902 TAC CTC AAA CAG GTA GGC GGC TTG ATC ACA TTC ATG GCC CTG GTA GGC

616 Ser Phe Val Val Pro Ala Glu Glu Glu Ala Glu Ile Gly Ala Val Asp Ala
 1947 AGC TTT GTG CCA GCA GAG GAG GAG GGC GAA ATT GGG GCA GTA GAC GCC

631 Ile Phe Thr Arg Ile His Ser Cys Glu Ser Ile Ser Leu Gly Leu
 1992 ATC TTC ACA CGA ATT CAT AGC TGC TGC GAA TCC ATC TCC CTT GGC CTC

646 Ser Thr Phe Met Ile Asp Leu Asn Gln Val Ala Lys Ala Val Asn
 2037 TCC ACC TTC ATG ATC GAC CTC AAC CAG GTG GCG AAA GCA GTG AAC

Fig. 19E

661 Asn Ala Thr Ala Gln Ser Leu Val Ile Asp Glu Phe Gly Lys
2082 AAT GCC ACT GCA CAG TCG CTG CTC CTT ATT GAT GAA TTT GGA AAG

676 Gly Thr Asn Thr Val Asp Gly Leu Ala Leu Ala Val Leu
2127 GGA ACC AAC ACG GTG GAT GGG CTC GCG CTT CTG GCC GCT GTG CTC

691 Arg His Trp Leu Ala Arg Gly Pro Thr Cys Pro His Ile Phe Val
2172 CGA CAC TGG CTG GCA CGT GGA CCC ACA TGC CCC CAC ATC TTT GTG

706 Ala Thr Asn Phe Leu Ser Leu Val Gln Leu Leu Pro Gln
2217 GCC ACC AAC TTT CTG AGC CTT GTT CAG CTA CAA CTG CTG CCA CAA

721 Gly Pro Leu Val Gln Tyr Leu Thr Met Glu Thr Cys Glu Asp Gly
2262 GGG CCC CTG GTG CAG TAT TTG ACC ATG GAG ACC TGT GAG GAT GGC

736 Asn Asp Leu Val Phe Phe Tyr Gln Val Cys Glu Gly Val Ala Lys
2307 AAC GAT CTT GTC TTC TTC TCC CAC ACA GCT GCC CAG GCT GGT GGT GCG AAG

751 Ala Ser His Ala Ser His Thr Ala Ala Gln Ala Gly Leu Pro Asp
2352 GCC AGC CAT GCC TCC TCC CAC ACA GCT GCC CAG GCT GGT CTT CCT GAC

766 Lys Leu Val Ala Arg Gly Lys Glu Val Ser Asp Leu Ile Arg Ser
2397 AAG CTT GTG GCT GCT CGT CGT GGC AAG GAG GTC TCA GAC TTG ATC CGC AGT

781 Gly Lys Pro Ile Lys Pro Val Lys Asp Leu Leu Lys Lys Asn Gln
2442 GGA AAA CCC ATC AAG CCT GTC AAG GAT TTG CTA AAG AAG AAC CAA

Fig. 19F

796 Met Glu Asn Cys Gln Thr Leu Val Asp Lys Phe Met Lys Leu Asp
2487 ATG GAA AAT TGC CAG ACA TTA GTG GAT AAG TTT ATG AAA CTG GAT
811 Leu Glu Asp Pro Asn Leu Asp Leu Asn Val Phe Met Ser Gln Glu
2532 TTG GAA GAT CCT AAC CTG GAC TTG AAC GTT TTC ATG AGC CAG GAA
826 Val Leu Pro Ala Ala Thr Ser Ile Leu Stop
2577 GTG CTG CCT GCT GCC ACC AGC ATC CTC TGA GAGTCCTTCCAGTGTCCCTC
2626 CCCAGCCTCCTGAGACTCCGGTGGGCTGCCATGCCCTCTTTGTTTCTTATCTCCCTCA
2686 GACGCAGAGTTTTTAGTTTCTCACAATTCTAATGTAATAATATATCTTAA

Fig. 19G